

REMARKS

I. STATUS OF CLAIMS AND FORMAL MATTERS

Claims 28-34 are under examination in this application. Claims 28 and 33 have been amended; claim 34 has been added; claims 8-15 and 19-25 have been cancelled. No new matter is added by this amendment.

It is submitted that the claims, herewith and as originally presented, are patentably distinct over the documents cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. §112. The amendments of and additions to the claims, as presented herein, are not made for purposes of patentability within the meaning of 35 U.S.C. §§§§ 101, 102, 103 or 112. Rather, these amendments and additions are made simply for clarification and to round out the scope of protection to which Applicants are entitled. Support is found throughout the specification and from the pending claims.

II. THE REJECTION UNDER 35 U.S.C. §112, 1ST PARAGRAPH IS OVERCOME

Claims 8-15, 19-25 and 28-33 were rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking adequate written description. Claims 8-15 and 19-25 have been cancelled; the rejection is traversed with respect to claims 28-33.

The Office Action asserts in the paragraph bridging pages 2 and 3 that the term “elite event” is not standard nor clearly described in the specification. It should be noted that at least the term “event” is well known in the art as relating to a genetic locus which, as a result of transformation, carries at least one copy of a gene of interest (as detailed in the specification on page 6, last paragraph). Similar language is used for instance in US20020120964A1, entitled “Cotton event PV-GHGT07(1445) and compositions and methods for detection thereof”.

The term elite event is also detailed in the description, on page 7, line 8 to page 8, line 10. Thus, it will be clear to a person skilled in the art that “elite event GAT-ZM1” is a genetic locus, resulting from the transformation of a corn plant with the pUC/Ac vector, whereby insertion of the transgene, i.e. the *pat* gene, in that specific locus, confers several characteristics to the plant, based on which this event was selected as an “elite event” (see page 16, lines 5-7 of the specification). This genetic locus is characterized by the presence of foreign DNA, comprising the *pat* gene, inserted at this particular locus, and particular plant DNA sequences at the 5' and 3' end of the insertion site. The nucleotide sequences of these 5' and 3' flanking sequences were

determined and are provided in the description as SEQ ID NO:6 and SEQ ID NO:10, respectively. Thus it is submitted that the term “elite event GAT-ZM1” is not only understood by a person skilled in the art, but is also extensively described in the application, so that event GAT-ZM1 can easily be identified by a person skilled in the art.

Claims reciting “% identity” and “essentially similar” have been cancelled, obviating the rejection on that basis.

Page 5 of the Office Action contains the assertion that the DNA molecules obtained from amplification using primers as described in claim 28 are not limited to those obtained from DNA comprising the elite event of the invention. In order to clarify the scope of this claim, claim 28 has been amended to relate to a DNA amplified from a nucleic acid sample of corn comprising elite event GAT-ZM1.

With regard to claim 33, the Examiner states that the insertion site within SEQ ID NO:6 and SEQ ID NO:10 is not clear. It is submitted that a person skilled in the art would understand that the place where the foreign DNA is inserted in the corn genome can be detected by the change from plant DNA to foreign DNA and visa versa. However, in order to clarify this, the specific nucleotides corresponding to the insertion site have been added to claim 33.

It is thus submitted that the assertion in the Office Action that numerous different DNA molecules are encompassed in the scope of the claims is not correct. Though the claims may encompass sequences of different length, they are all obtained from amplification from plant DNA comprising GAT-ZM1 of a region spanning the 5' flanking sequence and the foreign DNA contiguous therewith or the 3' flanking sequence and the foreign DNA contiguous therewith. Though the specific primers may change, resulting in DNA molecules of various lengths, the template is the same, so that these DNA molecules, which are all characteristic for DNA comprising elite event GAT-ZM1, will all be (at least partially) overlapping.

Thus, given the fact that the claims clearly refer to DNA sequences that can be obtained from the DNA of a plant comprising elite event GAT-ZM1, it is submitted that the description clearly conveys to a person skilled in the art that the Applicant was in possession of the invention when the application was filed. Reconsideration and withdrawal of the rejection under §112, first paragraph, are requested.

III. THE REJECTIONS UNDER 35 U.S.C. §112, 2nd PARAGRAPH ARE OVERCOME

Claims 8-15, 19-25, 28-31 and 33 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. As claims 8-15 and 19-25 have been cancelled, only the rejections of claims 28-31 and 33 will be addressed.

The term “elite event GAT-ZM1” was discussed with respect to the rejection under §112, first paragraph. As stated above it is indeed an art recognized term (see, for example, U.S. Patent Nos. 6,468,747, 6,395,485 and 6,333,449), and as such, is not indefinite.

The recitation of “the foreign DNA” in claim 28, has been changed to “foreign DNA of GAT-ZM1”. This amendment obviates the lack of antecedent basis and clarifies what is considered foreign DNA. “Foreign DNA” is defined on page 5, lines 17-20 of the specification and is described to mean “DNA introduced into the plant as a result of transformation”.

Claim 33 has been amended to refer to specific nucleotide sites that comprise “the insertion site”.

Reconsideration and withdrawal of the §112, second paragraph, rejections are requested.

IV. THE REJECTIONS UNDER 35 U.S.C. §102 AND §103 ARE OVERCOME

Claims 12 and 13 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Accession no. X20316, or in the alternative, by Accession no. 020951. Claim 15 was rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Accession no. AR040951. Claims 22-25 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Accession no. A36368. Claim 12 was rejected under 35 U.S.C. §102(b) as allegedly being anticipated by DeBlock *et al.*

Claims 8, 9 and 19 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over DeBlock *et al.* in view of Ahern. Claims 19-21 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Accession no. E00019, or in the alternative, by Accession no. A36368, each in view of Ahern.

All of these claims have been cancelled by this amendment, rendering these rejections moot. Reconsideration and withdrawal are requested.

V. DOUBLE PATENTING

Claims 8-15, 19-25, 32 and 33 were rejected under the judicially created doctrine of obviousness-type double patenting as allegedly being unpatentable over claims 7-10 and 13 of

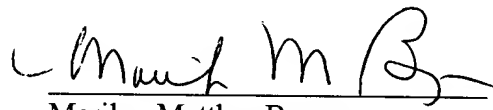
U.S. Patent No. 6,395,485. The rejection is traversed. U.S. Patent No. 6,395,485 relates to methods and kits for identifying elite event GAT-ZM1, while claims 32 and 33 of the instant application relate to a DNA molecule. Therefore, reconsideration and withdrawal of the double patenting rejection are requested. However, in the event that the double patenting rejection is maintained, a Terminal Disclaimer will be filed upon agreement of allowable subject matter.

CONCLUSION

In view of the amendments and remarks herewith, the application is in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are earnestly solicited. No fee is believed to be due for entry and consideration of this paper, however, any fee occasioned by this paper may be charged, or overpayment credited, to Deposit Account No. 50-0320.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

28. (Amended) A DNA molecule, which can be amplified from a nucleic acid sample of corn comprising elite event GAT-ZM1, using a set of primers comprising a first and second primer, wherein the first primer comprises a sequence of 15 to 30[20] nucleotides that is complementary to a sequence within SEQ ID NO:6 or SEQ ID NO:10, and wherein the second primer comprises a sequence that is complementary to [the] foreign DNA present in GAT-ZM1[said nucleic acid sample of corn].

33. (Amended) A DNA molecule isolated from corn tissue comprising a sequence of 20 nucleotides spanning nucleotides 341-342[the insertion site] within SEQ ID NO:6 or nucleotides 342-343 within SEQ ID NO:10.